



# MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

September 08, 2017

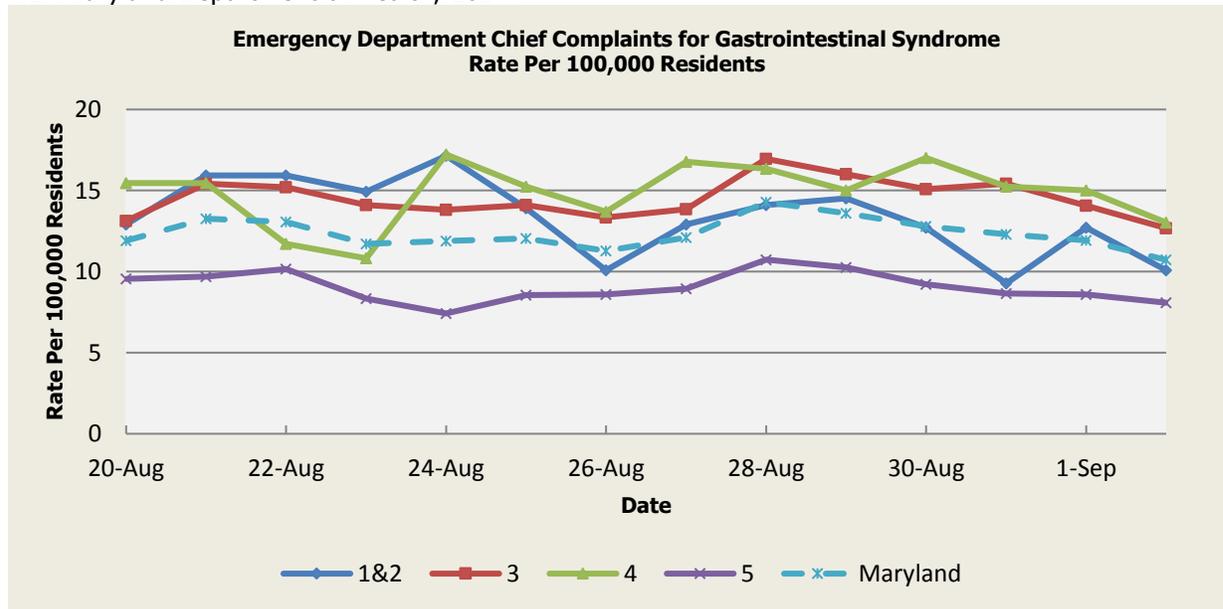
## Public Health Preparedness and Situational Awareness Report: #2017:35 Reporting for the week ending 09/02/17 (MMWR Week #35)

### CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts  
Maryland: Normal (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

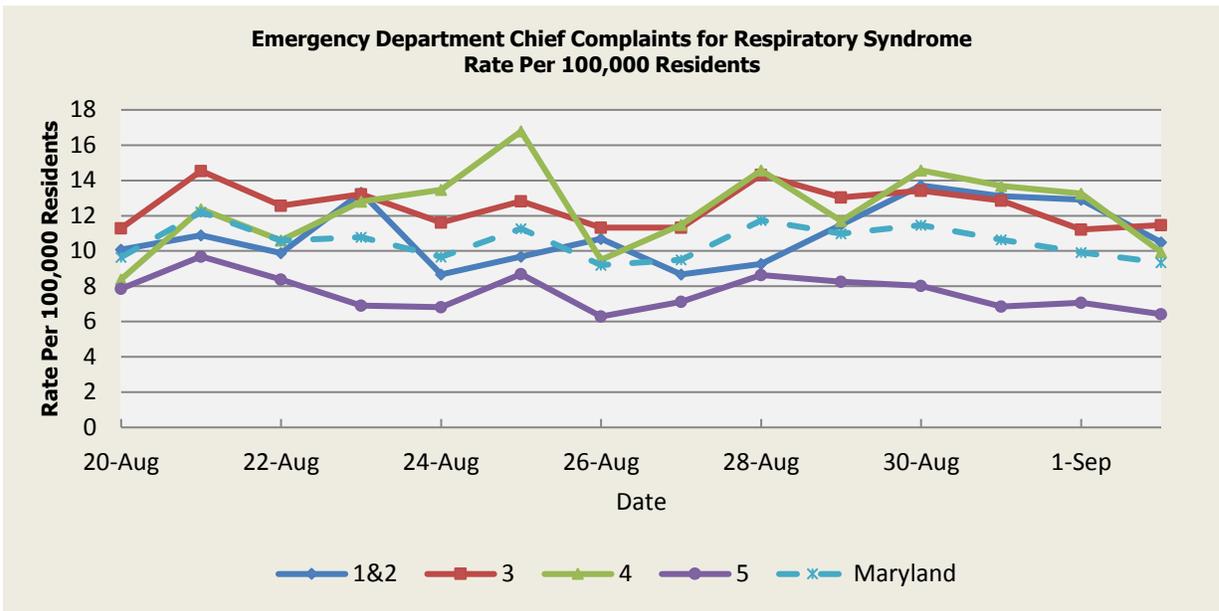
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were two (2) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis associated with a School (Region 5); and one (1) outbreak of Ciguatera Poisoning associated with a Private Home (Region 5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.33	14.43	14.74	9.84	12.52
Median Rate*	12.91	14.80	15.02	10.22	12.95

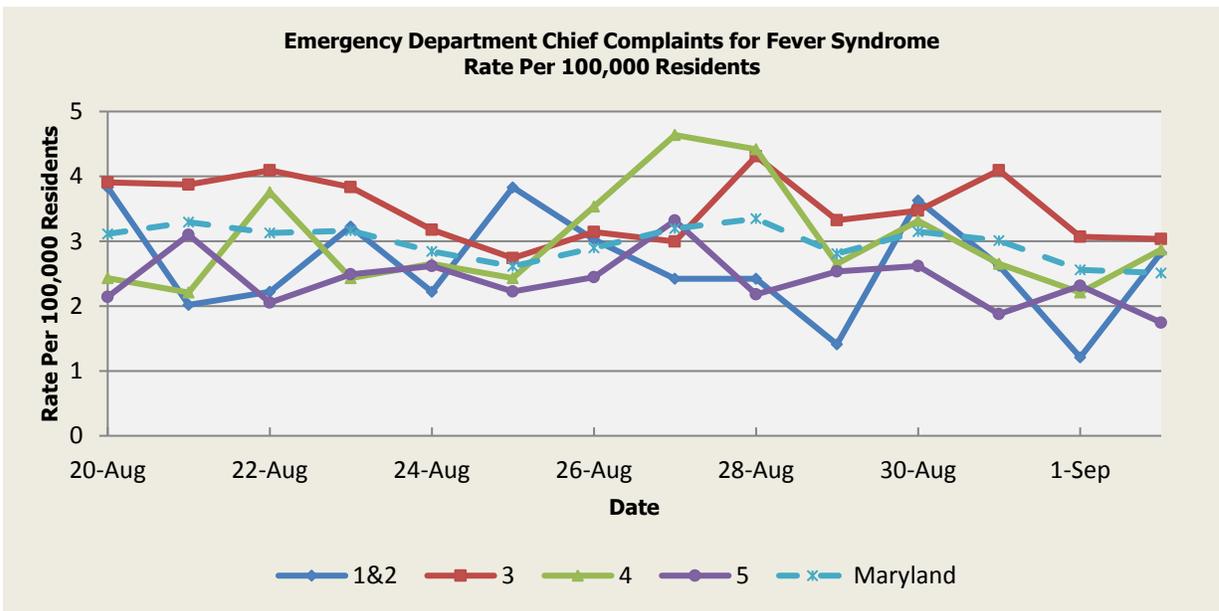
\* Per 100,000 Residents



There were no Respiratory Syndrome outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.51	13.80	13.70	9.51	11.96
Median Rate*	11.70	13.88	13.91	9.65	12.05

\* Per 100,000 Residents

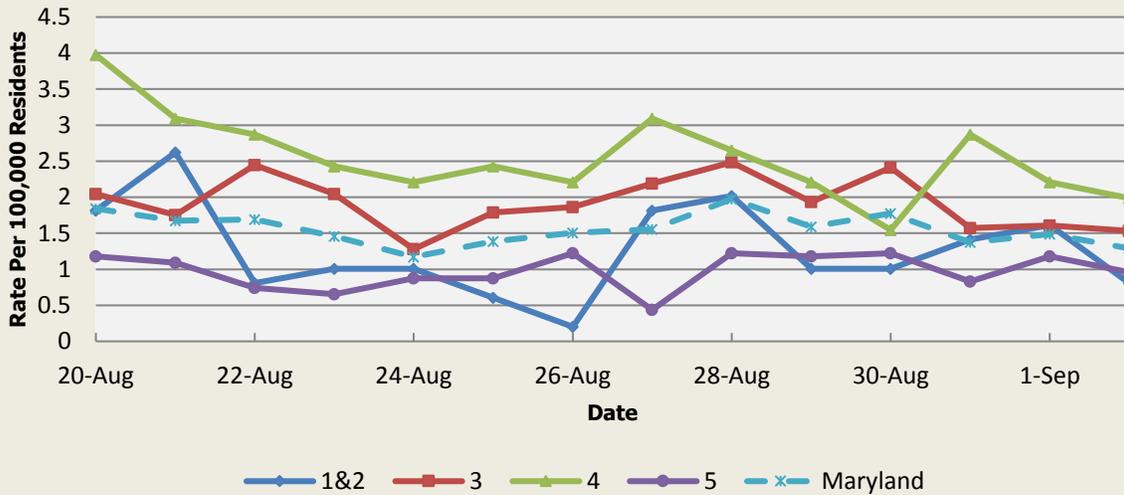


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.89	3.70	3.80	2.94	3.35
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

**Emergency Department Chief Complaints for Localized Lesion Syndrome  
Rate Per 100,000 Residents**



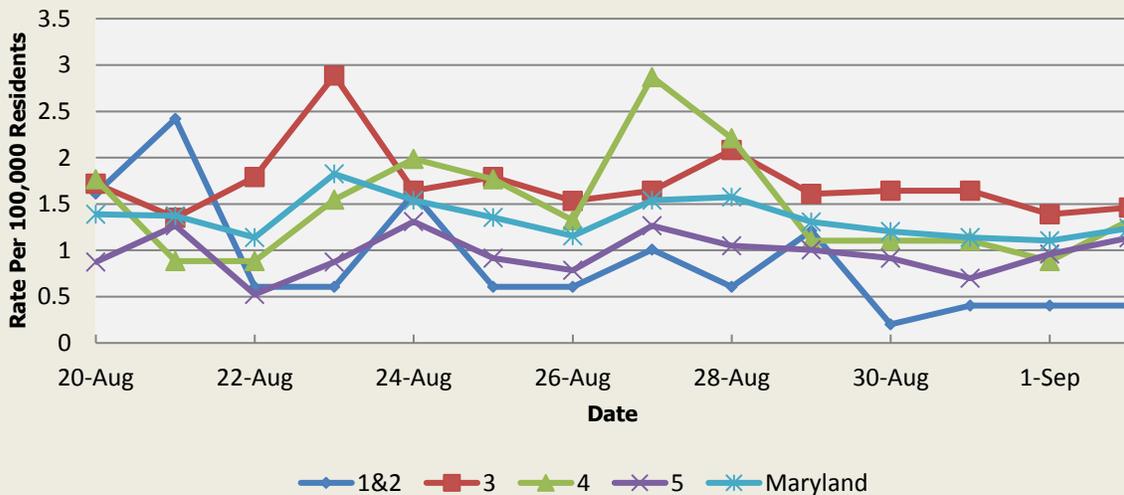
There were no Localized Lesion Syndrome outbreaks reported this week.

**Localized Lesion Syndrome Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.00	1.81	1.93	0.92	1.41
Median Rate*	1.01	1.83	1.99	0.92	1.42

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Rash Syndrome  
Rate Per 100,000 Residents**



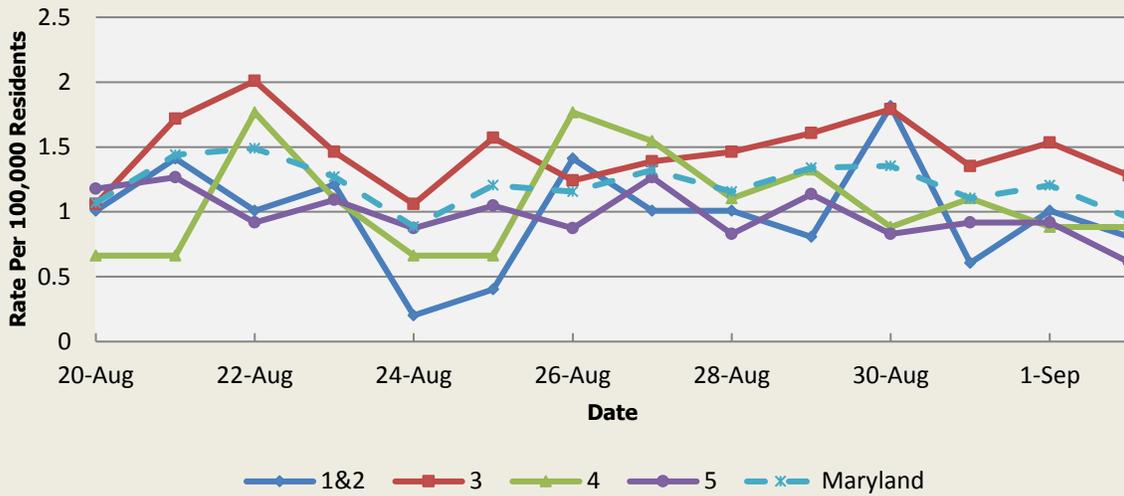
There were no Rash Syndrome outbreaks reported this week.

**Rash Syndrome Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.19	1.67	1.69	0.98	1.37
Median Rate*	1.21	1.68	1.77	1.00	1.39

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Neurological Syndrome  
Rate Per 100,000 Residents**

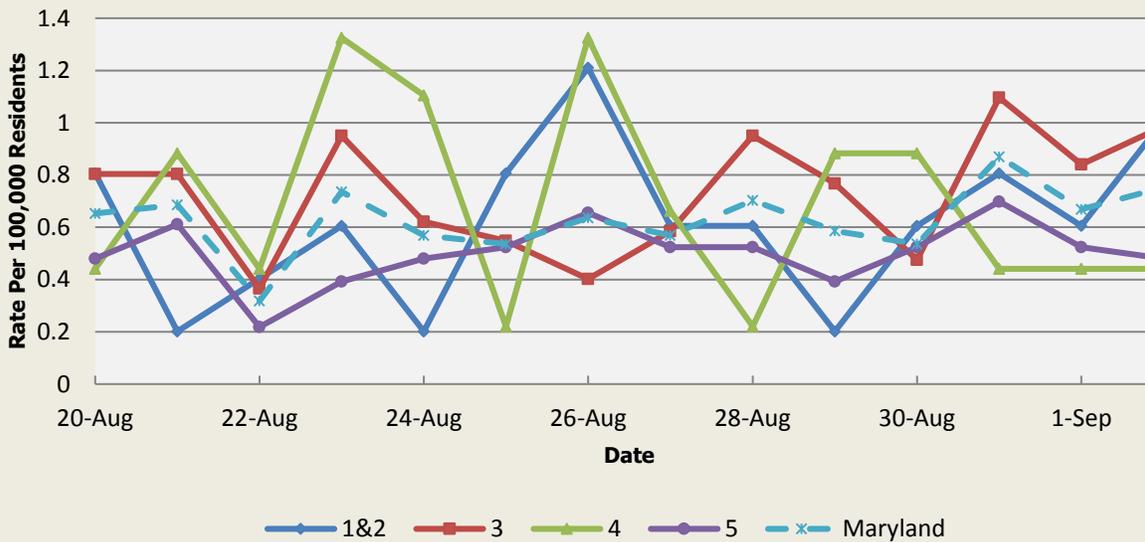


There were no Neurological Syndrome outbreaks reported this week.

<b>Neurological Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.76	0.66	0.48	0.64
Median Rate*	0.60	0.69	0.66	0.48	0.59

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Severe Illness or Death Syndrome  
Rate Per 100,000 Residents**

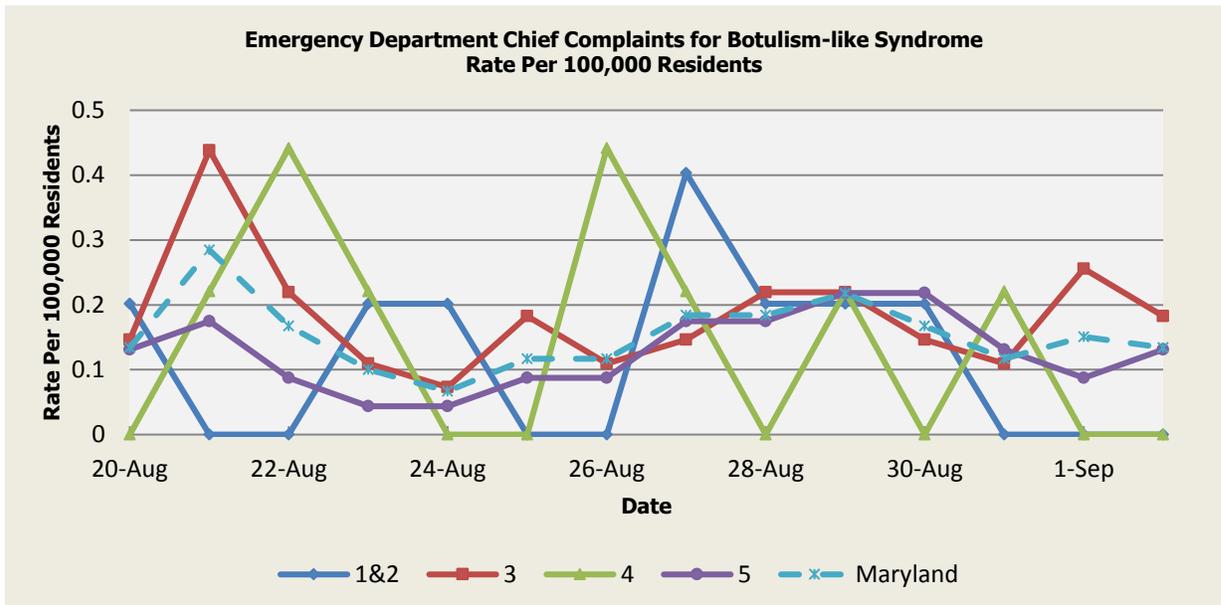


There were no Severe Illness or Death Syndrome outbreaks reported this week.

<b>Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.88	0.77	0.44	0.68
Median Rate*	0.60	0.91	0.66	0.44	0.70

\* Per 100,000 Residents

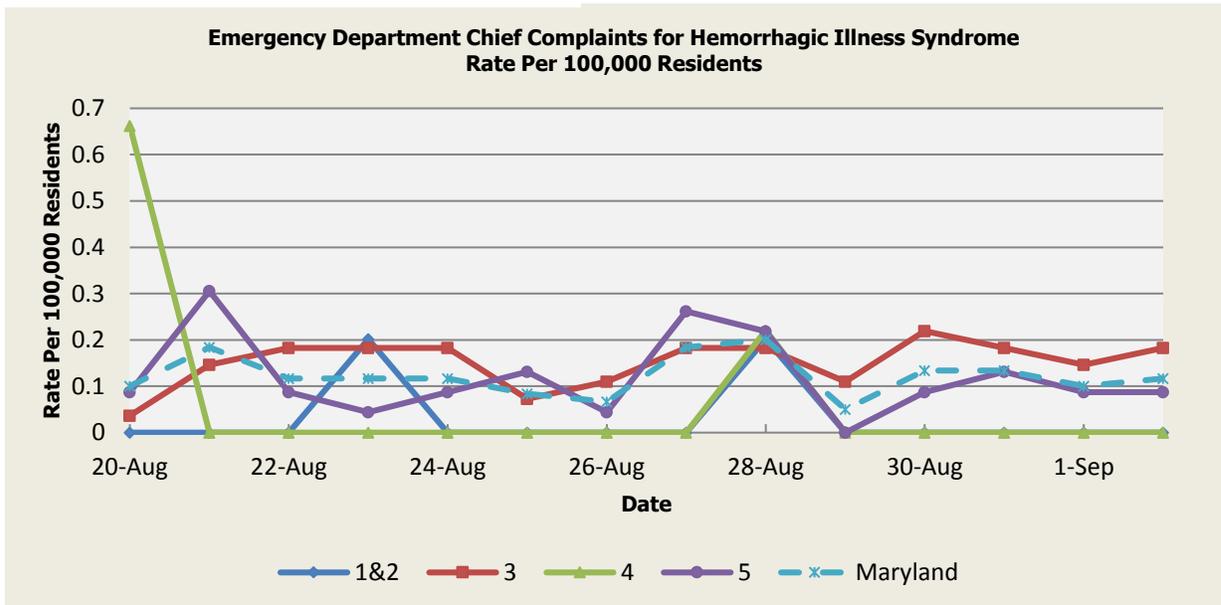
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 08/20 (Regions 1&2,5), 08/21 (Regions 3,4,5), 08/22 (Regions 3,4), 08/23 (Regions 1&2,3), 08/24 (Regions 1&2), 08/25 (Region 3), 08/26 (Region 4), 08/27 (Regions 1&2,4,5), 08/28 (Regions 1&2,3,5), 08/29 (Regions 1&2,3,4,5), 08/30 (Regions 1&2,5), 08/31 (Regions 4,5), 09/01 (Region 3), 09/02 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

\* Per 100,000 Residents

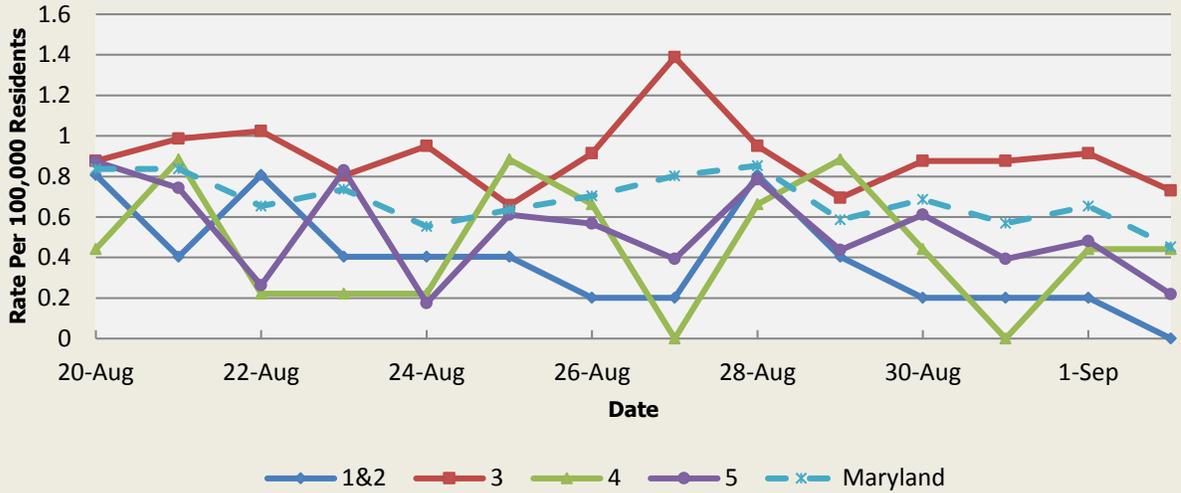


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 08/20 (Region 4), 08/21 (Region 5), 08/23 (Regions 1&2), 08/27 (Region 5), 08/28 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

\* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome  
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 08/20 (Regions 1&2,5), 08/21 (Regions 4,5), 08/22 (Regions 1&2,3), 08/23 (Region 5), 08/25 (Regions 4,5), 08/26 (Region 4), 08/27 (Region 3), 08/28 (Regions 1&2,4,5), 08/29 (Region 4), 08/30 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.50	0.33	0.30	0.40
Median Rate*	0.20	0.40	0.22	0.26	0.33

\* Per 100,000 Residents

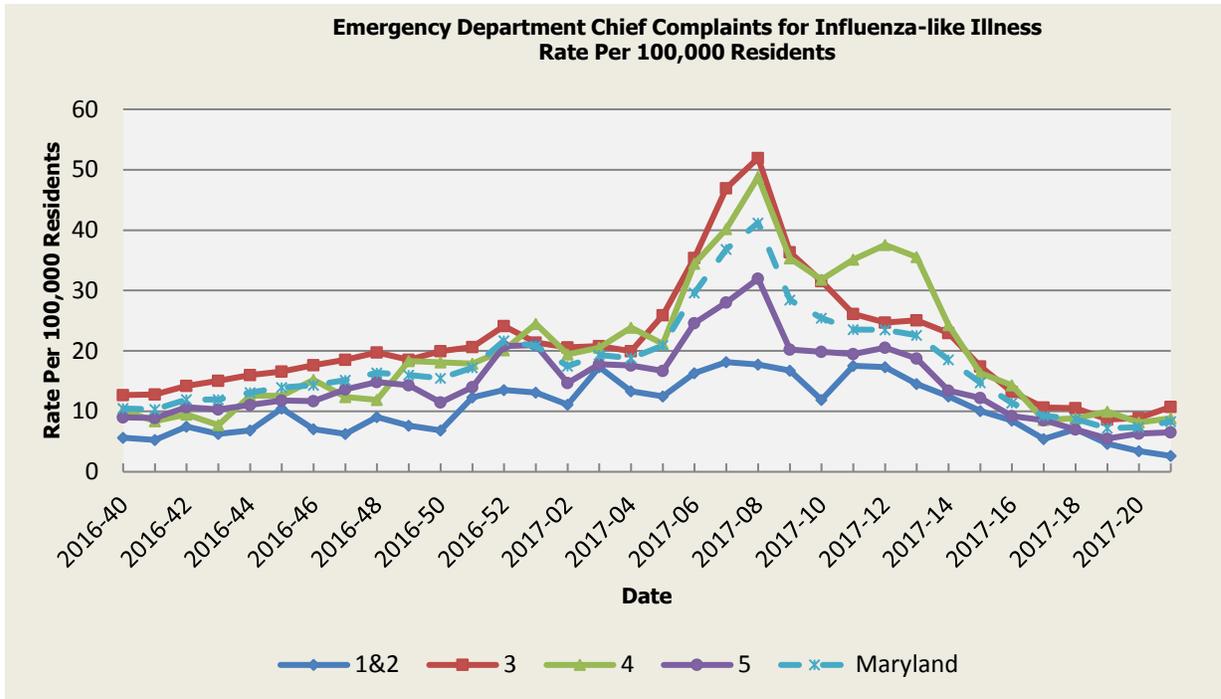
**MARYLAND REPORTABLE DISEASE SURVEILLANCE**

Condition	Counts of Reported Cases†					
	September			Cumulative (Year to Date)**		
	2017	Mean*	Median*	2017	Mean*	Median*
<b>Vaccine-Preventable Diseases</b>						
Aseptic meningitis	0	3.2	3	247	302.8	273
Meningococcal disease	0	0	0	4	3.6	4
Measles	0	0	0	4	4.2	4
Mumps	0	0.4	0	23	39	16
Rubella	0	0	0	1	4.4	3
Pertussis	0	3.2	4	156	222.6	241
<b>Foodborne Diseases</b>						
Salmonellosis	3	9.2	10	581	662	670
Shigellosis	0	1.6	1	178	144.2	172
Campylobacteriosis	2	5.6	7	573	547.2	544
Shiga toxin-producing Escherichia coli (STEC)	0	1.6	1	125	107	100
Listeriosis	0	0.2	0	17	12.6	13
<b>Arboviral Diseases</b>						
West Nile Fever	0	0.4	0	3	9.8	9
Lyme Disease	9	26	24	2575	2269.2	2193
<b>Emerging Infectious Diseases</b>						
Chikungunya	0	0	0	0	4.8	0
Dengue Fever	0	0	0	18	21.2	15
Zika Virus***	0	0.2	0	2	11.2	6
<b>Other</b>						
Legionellosis	1	1.6	2	158	124.2	131

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change \*Timeframe of 2011-2017\*\*Includes January through current month. \*\*\* As of September 08, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 48.

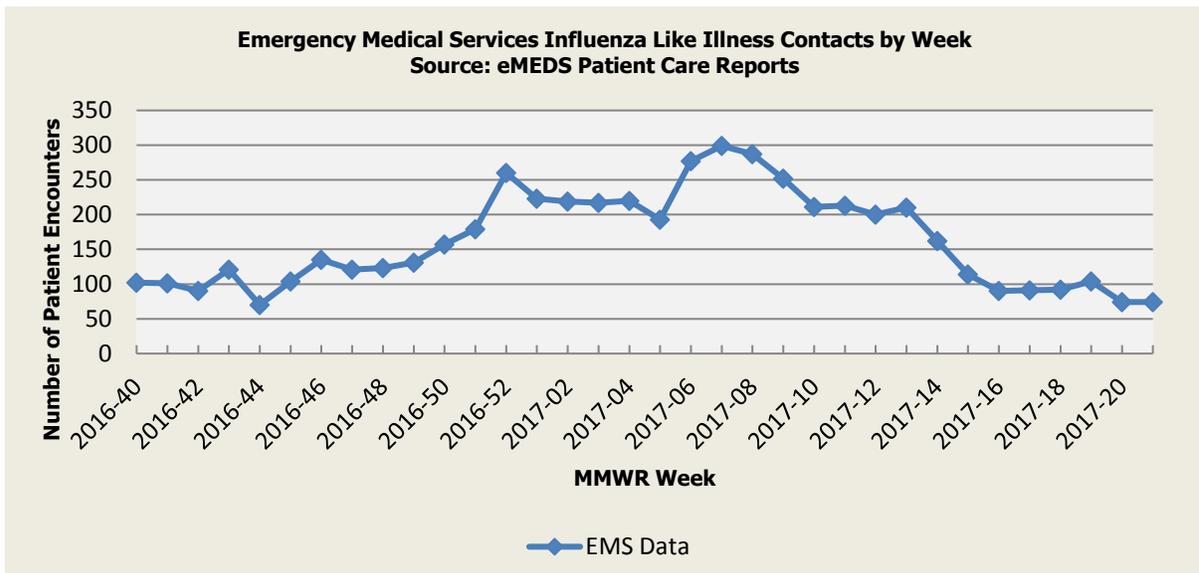
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



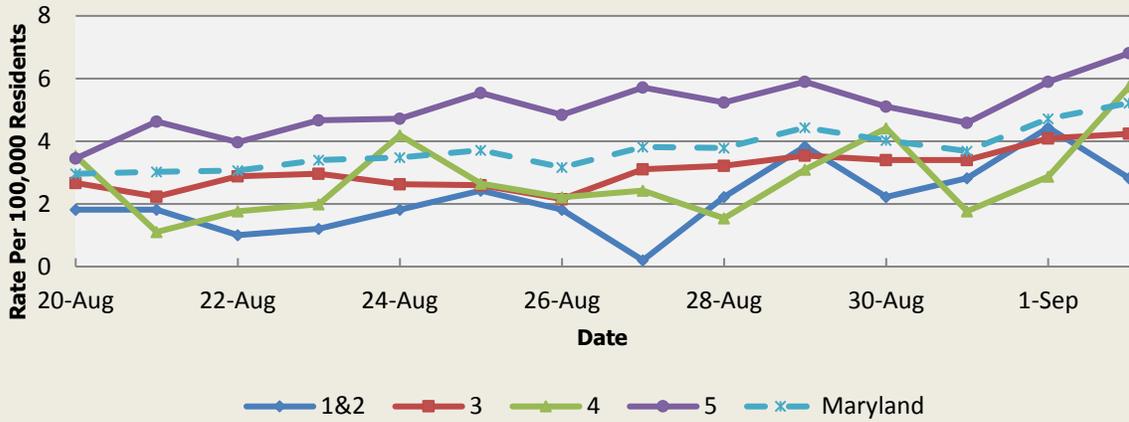
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

\* Per 100,000 Residents



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza  
Rate Per 100,000 Residents**

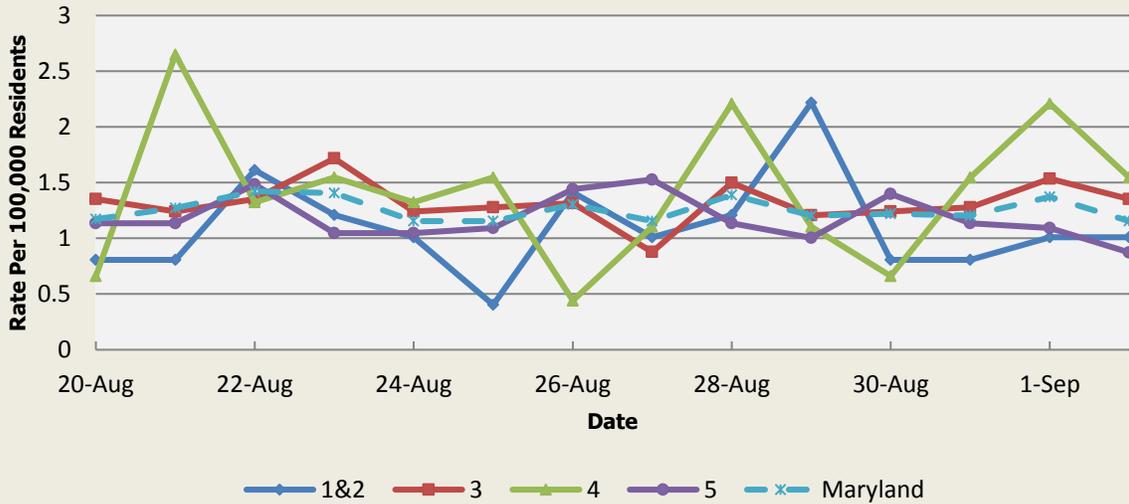


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

<b>OTC Sales Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.60	4.69	2.61	8.07	5.74
Median Rate*	3.23	4.38	2.43	8.03	5.52

\* Per 100,000 Residents

**Over-the-Counter Thermometer Sales  
Rate Per 100,000 Residents**



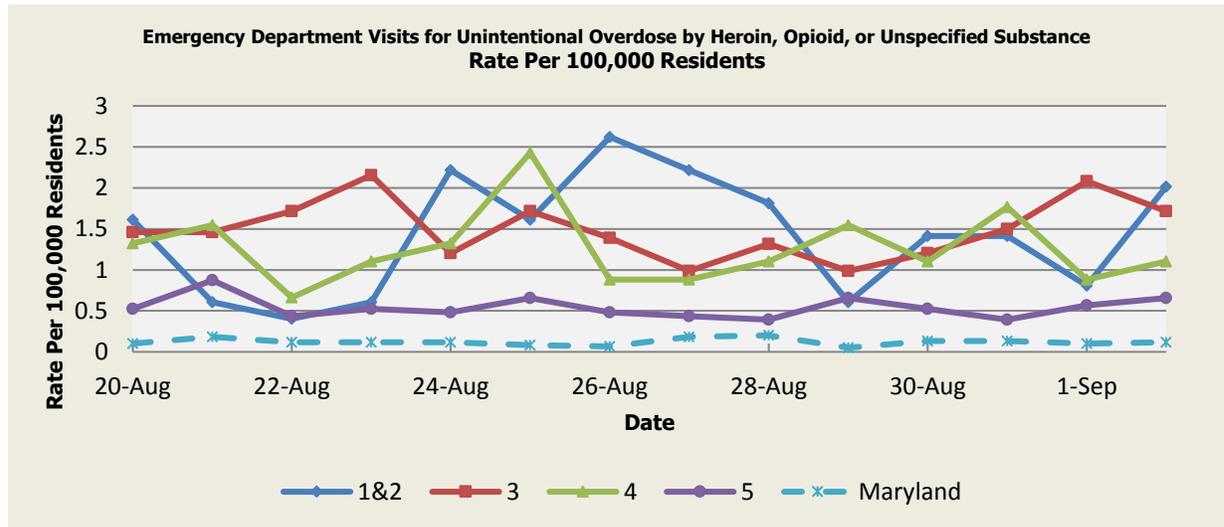
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

<b>Thermometer Sales Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.22	3.08	2.39	4.13	3.44
Median Rate*	3.02	3.03	2.43	4.06	3.36

\* Per 100,000 Residents

## SYNDROMIC OVERDOSE SURVEILLANCE

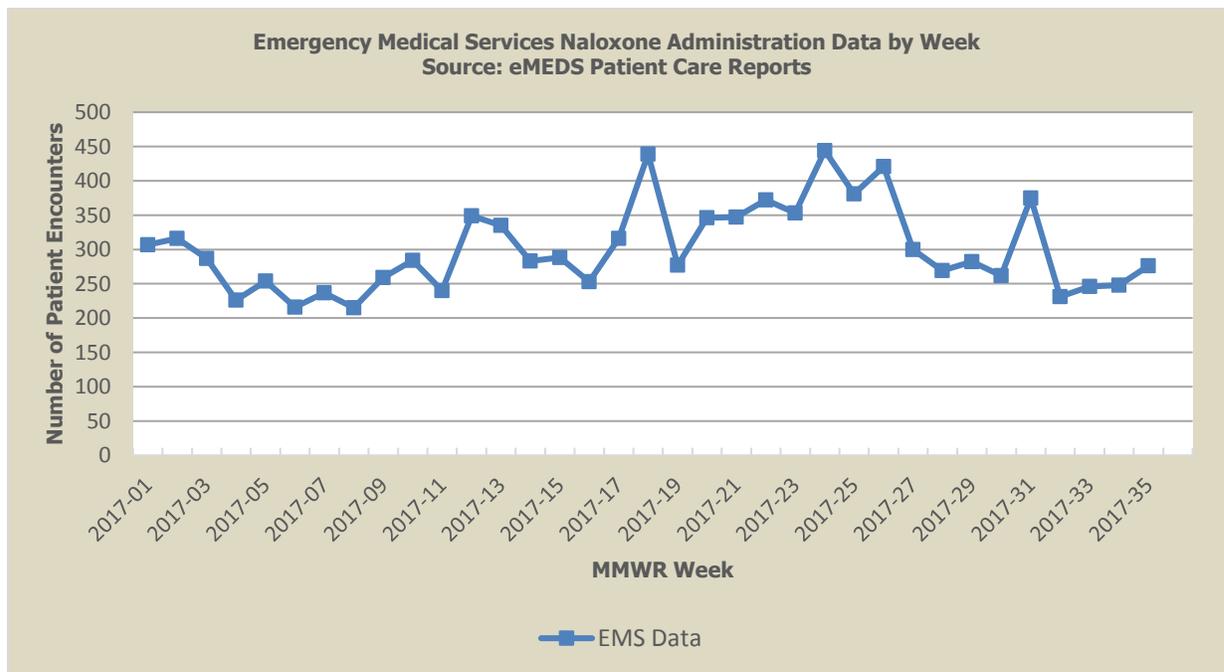
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



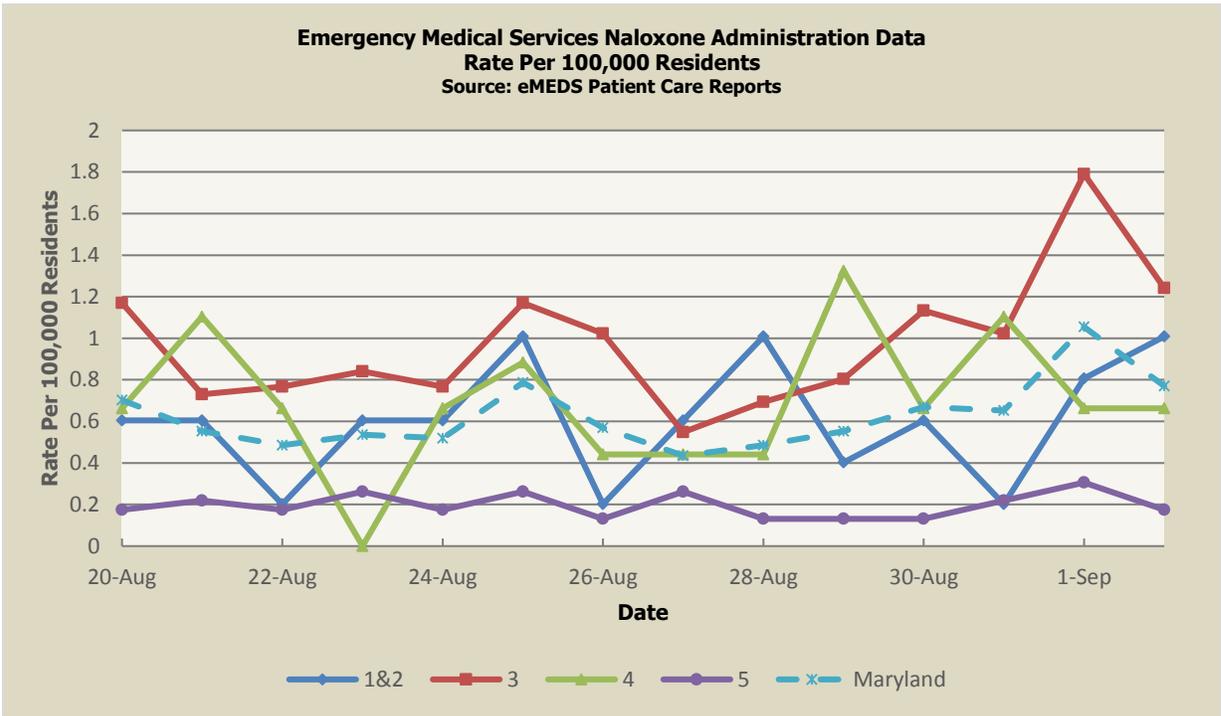
**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient’s signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

<b>EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 25, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA:**

**H5N1 (TAIWAN)**, 4 Sept 2017, New Taipei City is on high alert after a local slaughterhouse reported H5 avian influenza infections in chickens on 3 of its 9 slaughter lines. An investigation traced the infected poultry to 2 chicken farms, one in Yunlin County and the other in Taoyuan. Forty (40) other suspect chicken carcasses were frozen and sealed. Read More: <http://www.promedmail.org/post/5294005>

**H7N9 (CHINA)**, 6 Sept 2017, The China National Health and Family Planning Commission has reported an additional human case of avian influenza A(H7N9) in Jiangsu. The male patient, aged 58, in Zhenjiang has died. He had exposure to a live poultry market before onset. Since 2013, 1561 human cases have been reported with all but 31 reported in China. 763 cases have been reported just since October 2016. Read More: <http://www.promedmail.org/post/5295114>

### **HUMAN AVIAN INFLUENZA:**

*There were no reports of human cases of avian influenza in the United States or internationally at the time that this report as compiled.*

### **NATIONAL DISEASE REPORTS:**

**HEPATITIS A (CALIFORNIA)**, 2 Sept 2017, San Diego County declared a local health emergency early Fri 1 Sep 2017 night, adding a new level of urgency to a hepatitis A outbreak that has hit the homeless population hardest, killing 15 people and hospitalizing hundreds. Read More: <http://www.promedmail.org/post/5291024>

**EASTERN EQUINE ENCEPHALITIS (MULTI-STATE)**, 3 Sept 2017, According to the Bryan County Health Department, a horse in Bryan County has tested positive for eastern equine encephalitis (EEE). EEE virus is a mosquito-borne virus that causes swelling of the brain and is fatal in horses 70 to 90 percent of the time. EEE has also been detected in the mosquito population in western Chatham County, and a horse in Effingham County tested positive for EEE earlier in August. Read More: <http://www.promedmail.org/post/5291739>

**ST. LOUIS ENCEPHALITIS (CALIFORNIA)**, 6 Sept 2017, Mosquito-borne St. Louis encephalitis virus has been identified in Butte County for the first time since 1969, according to the Butte County Mosquito and Vector Control District. The disease [virus] was found in a group of mosquitoes collected

near Honcut. The disease is similar to West Nile virus. Most people who get it show no symptoms, but in extreme cases it can cause death or permanent disability. Read More: <http://www.promedmail.org/post/5298854>

**INVASIVE MOSQUITO (NEW MEXICO)**, 6 Sept 2017, *Aedes aegypti*, known as a potential carrier of the Zika virus, has been found in Eddy County. But none have been found to carry the virus so far. Currently, researchers are trying to identify whether populations of the mosquito can be found in high numbers in industrial, residential, or commercial areas. That information, as well as why they occur in certain areas, may help county vector control departments. Read More: <http://www.promedmail.org/post/5299477>

#### **INTERNATIONAL DISEASE REPORTS:**

**JAPANESE ENCEPHALITIS (INDIA)**, 2 Sept 2017, Under attack for Japanese encephalitis deaths at Gorakhpur's BRD Medical College, Uttar Pradesh health and family welfare department has sought assistance from various agencies to identify the pathogen infecting children in the region. The health department will take help from experts at the Indian Council of Medical Research (ICMR) and US-based agency Centers for Disease Control and Prevention (CDC) to check the spread of Japanese encephalitis in Gorakhpur region. Read More: <http://www.promedmail.org/post/5290553>

**E. Coli EHEC (JAPAN)**, 2 Sept 2017, The genotype of the O157 strain of *E. coli* found in people with foodborne illness after eating potato salad from deli counters in Gunma and Saitama prefectures is consistent, the Ministry of Health, Labor and Welfare has revealed. The same bacterial genotype has also been detected in people as far away as Shiga, Mie and Niigata prefectures. Read More: <http://www.promedmail.org/post/5290952>

**SIMIAN MALARIA (BRAZIL)**, 2 Sept 2017, A form of malaria parasite that has spread from howler monkeys to humans in Brazil has been identified by researchers, raising concerns for eradication of the disease in Brazil and beyond. Malaria was thought to have been eradicated from southern and south-eastern Brazil 50 years ago, but more than 1000 cases reported since 2006 from the Atlantic Forest region, in Rio de Janeiro state, including 2 outbreaks in 2015 and 2016, led researchers to investigate. Read More: <http://www.promedmail.org/post/5290968>

**AFRICAN SWINE FEVER (CZECH REPUBLIC)**, 2 Sept 2017, The total amount of dead wild boars discovered in the woods around Zlín, in the far east of the Czech Republic, stood at 94 at the end of August 2017. In this month, 23 new infected carcasses were found, which is a downward trend from July 2017, when 68 reports were sent to the World Organization for Animal Health (OIE). The 1st report of ASF in Czech wild boars was on Wed 21 Jun 2017. Read More: <http://www.promedmail.org/post/5291023>

**MERS- CoV (SAUDI ARABIA)**, 2 Sept 2017, As of this date, there have been a total of 1712 laboratory-confirmed cases of MERS-CoV infection, including 690 deaths reported case fatality rate 40.3 percent, 1001 recoveries, and 21 currently active cases/infections. Read More: <http://www.promedmail.org/post/5291366>

**HANTAVIRUS (PANAMA)**, 3 Sept 2017, Health officials are intensifying operations in Tonosi due to new hantavirus cases. The 3 new hantavirus fever cases are registered in Tonosi, which is why health authorities are intensifying operations in this region in Los Santos province. The woman was treated in the Tonosi Rural Hospital, whereas the other 2 cases were managed in the Joaquín Pablo Franco Hospital in Las Tablas, where the 37-year-old patient was released. Read More: <http://www.promedmail.org/post/5292431>

**CRIMEAN-CONGO HEMORRHAGIC FEVER (AFGHANISTAN)**, 4 Sept 2017, Congo hemorrhagic fever (CCHF) has killed 13 people in western Herat province this year [2017], with another 42 being treated for the deadly virus, according to officials. Health officials in Herat advised people to be careful these days due to increased interaction with livestock in the wake of Eidul Adha when Muslims across the globe slaughter millions of animals. Read More: <http://www.promedmail.org/post/5285110>

**WEST NILE VIRUS (ROMANIA)**, 4 Sept 2017, A total of 16 cases of meningitis and meningo-encephalitis with West Nile virus were registered in Romania between 9 May and 30 Aug 2017, which resulted in 6 deaths, according to data from the Ministry of Health. Half of the deaths were registered in Bucharest, with the other 3 being reported in Buzau, Braila, and Ilt. Read More: <http://www.promedmail.org/post/5288395>

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN)**, 4 Sept 2017, A suspected patient of Crimean-Congo hemorrhagic fever (CCHF) has been admitted in the Pakistan Institute of Medical Sciences (PIMS) [Islamabad] with symptoms of the disease. According to hospital sources, the blood samples of the patient from Kashmir were sent to the National Institute of Health (NIH) and he was moved to the isolation ward of the hospital. Read More: <http://www.promedmail.org/post/5293026>

**HANTAVIRUS (CHILE)**, 4 Sept 2017, 2 new cases of hantavirus were confirmed by the Araucanía SEREMI [Secretarial Regional Ministerial de Salud; local ministerial unit] after conclusive results were provided by the molecular virology laboratory of the Universidad Austral in Valdivia. Both cases are adults, 72 and 69 years of age, residents of rural localities in Collipulli. Read More: <http://www.promedmail.org/post/5293849>

**HEPATITIS A (AUSTRALIA)**, 5 Sept 2017, A hepatitis A outbreak has hit Sydney with 12 cases confirmed in the past 5 weeks. NSW [New South Wales] Health has launched an investigation, saying 10 of the people contracted the disease in Australia. The average is 2 cases of locally acquired hepatitis A each year. Hepatitis A is caused by a virus that spreads in contaminated food or through poor hygiene. Symptoms may include nausea, vomiting, fever, and yellowing of the skin, dark urine, and pale stools. Read More: <http://www.promedmail.org/post/5295983>

**ANTHRAX (ZIMBABWE)**, 6 Sept 2017, The country has contained an anthrax outbreak that killed one person and infected 56 in April this year when villagers in Binga ate meat from infected dead hippos. "The cumulative figures for anthrax are 57 cases and one death. Anthrax is a life-threatening infectious disease caused by bacteria that normally affects animals. Read More: <http://www.promedmail.org/post/5298609>

**OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website: <http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

